

POWER DOWN PROCESSING ISLANDS

Abstract

A structure and associated method of processing data on a semiconductor device comprising an input island, a processing island, and an output island formed on the semiconductor device. The input island is adapted to accept a specified amount of data and enable a means for providing a first specified voltage for powering the processing island after accepting the specified amount of data. The processing island is adapted to receive and process the specified amount of data from the input island upon powering the processing island by the first specified voltage. The output island is adapted to be powered by a second specified voltage. The processing island is further adapted to transmit the processed data to the output island upon said powering by the second specified voltage. The first specified voltage is adapted to be disabled thereby removing power from processing island upon completion of transmission of the processed data to the output island.